

GS02-5 **Creation of tumor blood vessel-specific antibodies for the next generation of biomedicines**

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Recently, molecular targeted agents have been used as therapeutic drugs for the treatment of intractable diseases such as autoimmune disorders. However, corresponding molecular targeted agents for cancer therapy have not yet been developed. The identification of new drug targets and development of molecular targeted agents for cancer therapy will play a major role in the next generation of biomedicines. From this perspective, the tumor blood vessel is regarded as a useful therapeutic target. Specifically, the tumor blood vessel invades tumor tissue and provides oxygen and nutrition to cancer cells. Indeed, the formation of tumor blood vessels is a major pathway of metastasis and has a significant impact on prognosis. Although a tumor blood vessel-targeting agent was anticipated to efficiently inhibit the formation tumor tissues, until now no such tumor blood vessel-specific antigen had been identified. Here, we have produced a corresponding antibody using a phage antibody library to identify the antigen. In this symposium, we will discuss our data and give an overview of future work.